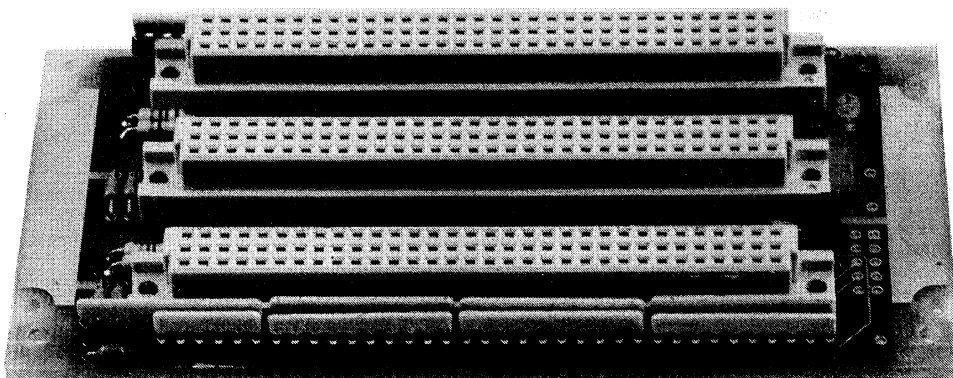




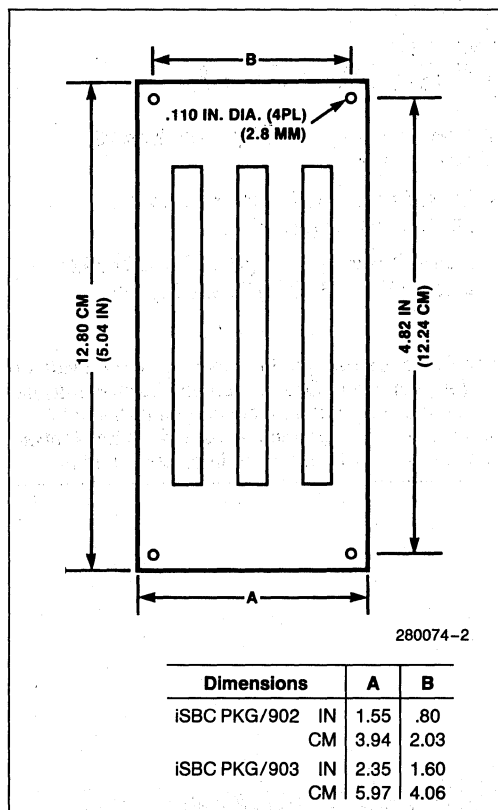
iSBC® PKG/902 iSBC® PKG/903 MULTIBUS® II iLBX™ II BACKPLANES

- Provides iLBX™ II Interconnect for Fastest CPU/Memory Data Transfers
- Designed to Mount in MULTIBUS® II Cardcage Assemblies
- Meets All Electrical and Mechanical Requirements of the MULTIBUS® II Specifications
- Uses a 6 Layer, Fully Terminated Backplane
- Includes a 10 Pin Connector for BITBUS™ Applications
- Available in 2 Slot (iSBC® PKG/902) and 3 Slot (iSBC® PKG/903) Sizes

The iSBC PKG/902 and iSBC PKG/903 series of iLBX II backplanes are designed to mount on the P2 side of Intel's MULTIBUS II cardcage assembly or other double Euro (6U) cardcage. One or more backplanes may be installed in a system to allow high speed data transfers between the CPU and memory boards installed in the system. The iLBX II backplane uses a 6 layer PCB with separate power and ground planes and full termination on all signal lines. This design minimizes system noise and ensures reliable operation in all applications.



280074-1



**Figure 1. iLBX™ II Board Dimensions
(iSBC® PKG/903 Shown)**

FEATURES

Mechanical and Electrical

The iSBC PKG/902 and iSBC PKG/903 iLBX II backplanes use a 6 layer printed circuit board (PCB) with separate power and ground layers and a signal lead routing scheme which minimizes ringing, cross-talk, and capacitive loading on the bus. Mounted on the PCB are two (iSBC PKG/902) or three (iSBC PKG/903) 96 pin DIN connectors, one 10-pin BITBUS connector, terminating resistors, decoupling capacitors, and power terminals. The resistors and capacitors are mounted into sockets, and all parts are press-fit into the backplane. The PCB is UL recognized for flammability.

Single In-line Package (SIP) style resistors are used to terminate all address, clock, data, and control lines. Each termination consists of two resistors which connects the line to +VCC and ground. Different size resistors are used according to the type

of driver connected to the line in an operating system. The SIP style resistors help make the board compact in size and allows the designer to mount several backplanes directly adjacent to one another in a system without having to skip slots.

Mounted on the rear of the backplane is a 10-pin BITBUS connector. This connector serves as the serial communication interface for any iSBX 344 BITBUS controller boards installed in the system.

The DIN type connectors are female, 96 pins, fully gold plated, and meet IEC standard 603-2-IEC-C096F. The connectors are mounted on 0.8" centers to match Intel's iPSB (Parallel System Bus) MULTIBUS II backplanes and are keyed to ensure proper mating to the MULTIBUS II board. The connector can provide up to 6 amps of current at +5V to each MULTIBUS II board in addition to the current available over the Parallel System Bus backplane.

Screw terminals on the backplane are provided for connection to +5V power and ground. These terminals, each of which can handle up to 25 amps of current, provide a simple and highly reliable connection method to the power supply.

SPECIFICATIONS

Mechanical and Environmental

Connector Spacing: 20.3 cm (0.8 in)

Number of Slots: iSBC PKG/902: 2 slots

iSBC PKG/903: 3 slots

Board Dimensions: See Figure 1

Weight: iSBC PKG/902—0.2 kg (8 oz)

iSBC PKG/903—0.3 kg (12 oz)

Connectors:

DIN: 96-pin female, gold plated, meets IEC standard 603-2-IEC-C096-F

BITBUS: 10-pin male, gold plated, T&B Ansley 609-1012M, or equivalent

Constructed Method: Six layer backplane with separate VCC and Ground layers

All connectors, power terminals, and resistor/capacitor sockets are press-fit into the backplane.

Mounting Hole Location: See Figure 1

Operating Environment: 0°C–70°C ambient temperature; 0% to 90% relative humidity, non-condensing; 0 ft.–10,000 ft. altitude



Electrical

Backplane Electrical Characteristics and Line Terminations: Per Intel MULTIBUS II specification 146077, Sec. II, iLBX II

Power Connections

Type: Screw terminal block: AMP P/N 55181-1; Winchester P/N 121-25698-2; or equivalent

Mating Connection: No. 6 locking spade or ring tongue lug

Quantity: 2(VCC, Ground)

Current Rating: iSBC PKG/902: 12 amps; iSBC PKG/903: 18 amps (Power and Ground)

Maximum Current Available Per Slot: 6 amps (over the iLBX II backplane)

REFERENCE MANUAL

MULTIBUS II Cardcage Assembly and iLBX Backplane User's Guide, P/N 146709-001 (not supplied)

ORDERING INFORMATION

Part Number	Description
iSBC PKG/902	2 slot iLBX II Backplane
iSBC PKG/903	3 slot iLBX II Backplane